Stevens Ranch Complex
Approximately 1 mile west of State
Route 101 (Montery Road) on unpaved
East Emado Lane
Coyote Vicinity
Santa Clara County
California

HABS No. CA-2018

HABS
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43-COYO.V,
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PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
Heritage Conservation and Recreation Service
Department of the Interior
Washington, D.C. 20243

HISTORIC AMERICAN BUILDINGS SURVEY HABS No. CA-2018

STEVENS RANCH COMPLEX

HABS CAL 43-COYO.1,

Location: Approximately 1 mile west of State Route 101 (Monterey Road), with access provided by unpaved East Emado Lane, Coyote Vicinity, Santa Clara County, California.

USGS Morgan Hill Quadrangle, Universal Transverse Mercator Coordinates: 10.613140.4119130.

Present Owners: State of California
and
Mr. and Mrs. Earl Malech (1977).

Present Occupants: Mr. and Mrs. Earl Malech (1977).

Present Use: Fruit farm with drying facilities (1977); two structures and tram tracks removed for reassembly and/or interpretive exhibits at the San Jose Historical Museum.

Significance: The Stevens Ranch Complex includes orchards, buildings, and fruit drying equipment that illustrate agricultural development in Santa Clara County in the late nineteenth and early twentieth centuries. The early dehydrater and tram tracks on the ranch represented innovations in fruit drying technology when they were installed. The Stevens family were prominent and successful orchardists and operated drying facilities that served nearby farms.

PART I. HISTORICAL INFORMATION

A. History of The Ranch:

In 1867, Orvis Stevens arrived in Santa Clara County and purchased 108 acres from a member of the Fisher family, who owned a large ranch, originally known as the Ranch Laguna Seca, for $2,000. (Thompson and West, p. 61; Malech, personal communication). It is possible that Stevens used the land for raising stock. In 1875, he moved to Coyote, where he operated a hotel called "Twelve Mile House, rented from members of the Fisher family. In addition, Stevens operated a general store, and was a blacksmith, and the local postmaster. (Butler, pp. 174-175). In 1882, he returned to his ranch, at the time known as "The Dido", and planted orchards (Stevens). The fruits planted included apples, prunes, pears and peaches. His orchards were among the first in the Coyote area. (Sawyer, pp. 597, 1617).

The Santa Clara County fruit growing industry began in the 1850s and was supported largely by the influx of gold miners. With the completion of the transcontinental railroad in 1868, the industry boomed. In 1869, 33 tons of fresh fruit were shipped east from Santa Clara County; one year later, 700 tons of fruit were shipped from the county.

During the nineteenth century, Santa Clara County orchardists developed techniques for preserving fruit by drying. The first method employed French techniques. Fruit began to dry on straw spread under trees, and was then put through a series of alternating "coolings" and exposures to dry air. Finally, it was placed in a crude oven-like dryer. This process produced a leathery dark black prune with carmelized sugar which was not successful in the American market. By 1870, the technique of dipping fruit in a lye solution was employed to hasten the drying process and produce fruit of a lighter color, in addition to preventing sugar carmelization. Sulfur fumes were also used to bleach the fruit. Wood burning dehydraters, which circulated heated air over the fruit to dry it, were widely used until 1879, when sun-drying was found to be more efficient. Towards the end of the nineteenth century, new machines were developed to grade fruit by size, wash and dip the pieces, and spread them in drying trays, producing a more uniform and cleaner product. The drying process most widely employed in the 1890s consisted of the following steps: (1) fruit was size graded by shaking it through screens, which also removed twigs and dirt; (2) fruit was dipped in a hot lye solution in dipping sheds, initially using simple counterweights and kettles with holes for dipping and later with mechanized devices; (3) fruit was cut, pitted, placed in drying trays with cut side up by a spreader, and left exposed to sun and air for three to four days in a dry yard, usually close to the orchards; (4) fruit was screened and washed to remove litter, insects, etc., at first by hand and later by machines; (5) fruit was put through "sweat" in dried fruit storage shed to equalize moisture; (6) fruit was dipped in hot water bath with glycerine to clean and provide gloss; (7) fruit was sulfured in sulfuring shed to bleach out dark colors (for all fruits except prunes); (8) fruit was transported to storage sheds, in some orchards using tram systems or elevators; (9) fruit was packed at packing plants after being flattened and softened by feeding through soft rubber rollers. Some orchardists, such as Orvis Stevens, had all the facilities, and dried fruit from other orchards as well as their own.

Starting around 1919, sun-drying was replaced by sophisticated dehydraters. Hot air, heated by furnaces under the structure, was circulated over the fruit with fans. Vents permitted the air to enter and leave the building. This process dried fruit in about twenty-four hours, roughly one quarter of the time required for sun-drying. Later in the twentieth century, thermostats were added to dehydraters. By the 1920s, electric or gas powered machines were used for grading, dipping and spreading the fruit, replacing the earlier hand cranked machines.

Orvis Stevens, and later his sons, Frank, Charles and Burt, were successful orchardists. Prunes were the most widely grown fruit in Santa Clara County, but Stevens concentrated on other crops. In 1896 the ranch consisted of 649 apricot trees, 425 Bartlett pear trees, 215 peach trees, 400 apple trees, 4 acres of muscat, rose of Peru and malvoise vines. A one-and-one-half acre portion of the apricot orchard was irrigated. Stevens owned forty swarms of bees. He constructed a fruit drying plant near his orchards, and dried the products of nearby orchards as well as his own. He also made vinegar from rejected fruit. In 1898, Stevens dried 30 tons of fruit. Occasionally, he also shipped green fruit east. (San Jose Mercury, 1896, p. 259). The Stevens ranch included a tram system to carry drying trays from the washer-grader machine to the dehydrater, drying and sulfuring house, and cutting and storing sheds. In 1902, the Stevens family built a cable line across Coyote Creek to transport their product to market when the water was too high (Stevens and Malech). The ranch was one of the first to employ the "modern" dehydraters which became available in 1919. The property continued to be used in 1977 fruit growing and drying. More modern equipment including mechanized dehydraters with thermostat controls and fork lifts for transporting fruit between the sturctures were added.

B. Sources of Information:

1. Views of the Ranch:

Drawings: 3 measured drawings of the Barn and Stevens Ranch (Structure 11: Fruit Tray Storage Room) and
1 measured drawing of Tram Tracks at Stevens Ranch Prepared for the City of San Jose in cooperative agreement with the Califorina Department of Transportation, District - 04 Drawn by Dene Hendrick, 1977;
available at the San Jose Historical Museum.

Photographs: 1 photograph of Main House (Structure 1), ca. 1900 (photographer unknown); available at the San Jose Historical Museum.

2. Bibliography:

a. Primary and unpublished sources:

King, F. and P. Hickman "The Southern Santa Clara Valley: A General Plan for Archaeology", 1973. Manuscript on file with the Frederic Burk Foundation for Education, California State University, San Francisco, Califorinia.

Personal Communication with Mr. and Mrs. Earl Malech, owners of Stevens Ranch, 1977.

Stevens, P. "A Family History", 1958. Manuscript on file with Caltrans, District-04, San Francisco.

b. Secondary and published sources:

Butler, P.F. The Valley of Santa Clara: Historic Buildings, 1872-1920. San Jose, California: 1975.

"Santa Clara County and Its Resources" San Jose Mercury, 1895, 1896.

Sawyer, E.T. History of Santa Clara County with Biographical Sketches. Los Angeles, California: 1922.

Thompson and West, Historical Atlas Map of Santa Clara County, 1876.

Prepared by Emily J. Harris
Historic American Buildings Survey
August 1979

From Research compiled by the
Federal Highway Administration
Caltrans
1977-1978

PART II. ARCHITECTURAL INFORMATION

Structure 1: Residence. Built ca.1856. This is a one story frame structure covered with clapboard that measures approximately 28' by 38'. It is T-shaped with gable roofs and a front porch. There are fish scale shingles and a circular window in the front gable end. The structure was probably built before Stevens bought the property, and has been extensively altered.

Structure 2: Main House. Built ca. 1876-1882. This is a two story frame structure covered with clapboard that measures approximately 38' by 48'. It is L-shaped with a rear addition, and has gable roofs. The structure originally had a bracketed cornice, and a circular window in the gable end. The two end bays on the second story had heavy lintels, and the center bay was pedimented. The front porch had bracketed supports, lattice work underneath the porch, and lattice work surrounding the deck on the porch roof. Alterations include removal of much original exterior ornamentation, reconstruction of interior walls, replacement of wallcoverings, and addition of a modern kitchen and bathroom.

Structure 3: Milk house. Built ca. 1880-1890. This is a one story wood frame structure with concrete walls and a full basement. It is rectangular and measures approximately 16' by 18'. It has a gable roof covered with wood shingles. The structure was originally used for keeping milk and other fresh foods cool, and was later used for general farm storage.

Structure 4: Barn. Built ca. 1915. This is a one-and-one-half story frame structure with horizontal board siding. It is rectangular and measures approximately 36' by 38'. It has gable roof covered with shingles and sliding double front doors. It was used for storage of fruit.

Structure 5: Welding Shop. Built ca. 1920. This one story wood, metal frame and cinder block structure is open ended and has windows on all sides. It measures approximately 32' by 58'.

Structure 6: Barn. Built ca. 1890. This is a one-and-one-half story frame structure with vertical board and batten siding. It is rectangular with side windows and a two bay front, and measures approximately 38' by 52'. There is a gable roof on the central portion and shed roofs on the sides.

Structure 7; Barn. Built ca. 1890. This is a one story frame structure with vertical board and batten siding. It is rectangular with an open sided side shed addition and measures approximately 24' by 30' overall. The main structure has a shingled gable roof, and the shed has a sheet-metal roof.

Structure 8: Storage shed. Built ca. 1890. This is a one story frame structure with vertical board and batten siding. It has a shed roof, is open on one side, and measures approximately 16' by 40'.

Structure 9: Storage shed. Built ca. 1890. This is a one story frame structure with vertical board siding. It has a shed roof, is open on one side, and measures approximately 14' by 66'.

Structure 10: Outbuilding. Built ca. 1890. This is a one story frame structure with vertical board and batten siding. It is L-shaped and measures approximately 22' by 52'. The gable roof is covered with corrugated metal.

Structure 11: Fruit Tray Storage Room. Built ca. 1890. This is a one story frame structure on a post and beam foundation with vertical board siding. It is rectangular and measures approximately 30' by 60'. The frame is rough sawn redwood. There are large sliding double doors on each end of the building, and unglazed windows along both sides below the eaves. The gable roof is covered with composition sheets, but was originally shingled. The roof is supported by modified King Post Trusses (similar to Waddell "A" trusses) and has no ridge beam. The interior is sheathed in vertical boards to a height of 5'8". The floor is random width boards. The structure was used for storage of fruit which was completely dry. The doors on the northeast end allowed entrance for loaded tram cars which were moved from the dehydrater area via a small transfer table. With the table lined up and locked in place, the tram cars could be pushed into the structure tracks which run the full length of the building. The southwest doorway probably served as a loading point for wagons or trucks that were used to ship the fruit to market. The tram track also serves this door, and it is likely that fruit containers were loaded from storage into a tram car and pushed to the door for transfer to the shipping vehicle. This structure will be dismantled as part of the Route 101 freeway project, Cochran Road to Ford Road, Santa Clara County, California. It will be restored, with the tram tracks after being relocated to the San Jose Historical Museum.

Structure 12: Dehydrater. Built 1919. This is a one story concrete walled structure. It is rectangular and measures approximately 28' by 38'. It has a full basement that was used to house a furnace. Hot air from the basement entered the first floor through vents and was circulated by fans. The air escaped through other vents in the first floor. According to the property owners this was one of the first "modern" dehydraters in Santa Clara County. It has no thermostat or other automatic temperature controls. The thick masonry walls probably helped to stabilize temperatures.

Structure 13: Shed and Platform. Built ca. 1915. This wood frame shed has a gable roof covered with corrugated metal. The shed contains the shaker-dipper-spreader machinery. The concrete platform was used to hold bins of fruit before they were fed into this machine. Tram tracks lead from this building to the dehydraters (Structure 14).

Structure 14: Dehydraters. Built 1928 and 1955. These are one story cinderblock structures with corrugated tin low gable roofs. They have full basements which house furnaces. They measure approximately 6' by 50'. These dehydraters are equipped with thermostats. Tram tracks lead from them to the Cutting and Tray Scraping Shed (Structure 15).

Structure 15: Cutting and Tray Scraping Shed. Built ca. 1900. This is a one story open-sided frame structure covered with clapboards. It is rectangular and measures approximately 36' by 38'. The gable roof is covered with shingles. It was used for cutting fruit and scraping the drying trays. Tram tracks connect it with the dehydraters (Structure 14) and with the sulfuring shed (Structure 17).

Structure 16: Privy. Built ca. 1890. This wood frame structure is covered with horizontal board sheathing. It measures approximately 7' by 8'. The gable roof is covered with shingles. There is a full entablature returned in the gable ends and supported by carved ornamental brackets. There is a pedimented window in the gable end. The privy has four holes and is divided into two compartments.

Structure 17: Sulfuring Shed. Built ca. 1910. This wood frame structure measured approximately 8' by 20', and had a flat roof. Two tram tracks inside the building allowed loaded tram cars to be rolled inside for sulfuring. Hinged double doors sealed the entrance. A transfer table at the southeast end allowed utilization of both tracks. The structure collapsed prior to August 8, 1978.

Structure 18: Storage shed. Construction date unknown. This is a 20' by 34' one story frame structure attached to the rear of the dehydrater (Structure 12). It apparently served as a cooling shed for racks of fruit. The foundation is concrete piers. Frame members are rough sawn redwood. The southeast end is open and the northeast end is connected to the dehydrater by a vertical sliding door. The sides are now sheathed in old fruit drying trays and may have been open originally. The gable roof is supported by five modified King Post Trusses (similar to Waddell "A" Trusses). A transfer table outside the shed allowed the loaded cars to be transfereed to the fruit tray storage room (structure 11) when cool. This structure will be dismantled as part of the Route 101 freeway project, Cochran Road to Ford Road, Santa Clara County, California. The wood from the building will be used for interpretive exhibits by the San Jose Historical Museum.

Prepared by Emily J. Harris
Historic American
Buildings Survey
August 1979

From research compiled by
Federal Highway
Administration
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PART III. PROJECT INFORMATION

This project was undertaken by the Federal Highway Administration and Caltrans in compliance with Executive Order 11593 and a Memorandum of Agreement with the Advisory Council on Historic Preservation as a mitigative effort in the project to improve Route 101 south of Cochran Road in Morgan Hill to north of Ford Road in San Jose. John Burns, AIA, was the HABS project coordinator. Photographs were taken on August 8 and 9, 1978 by Pete Asano. The written data was prepared in the HABS office by Emily J. Harris in August 1979, from research compiled by the Federal Highway Administration and Caltrans in 1977 and architectural descriptions of the buildings that will be dismantled prepared by John Snyder, Caltrans Staff Architectural Historian in 1978.